

FIGURE 1

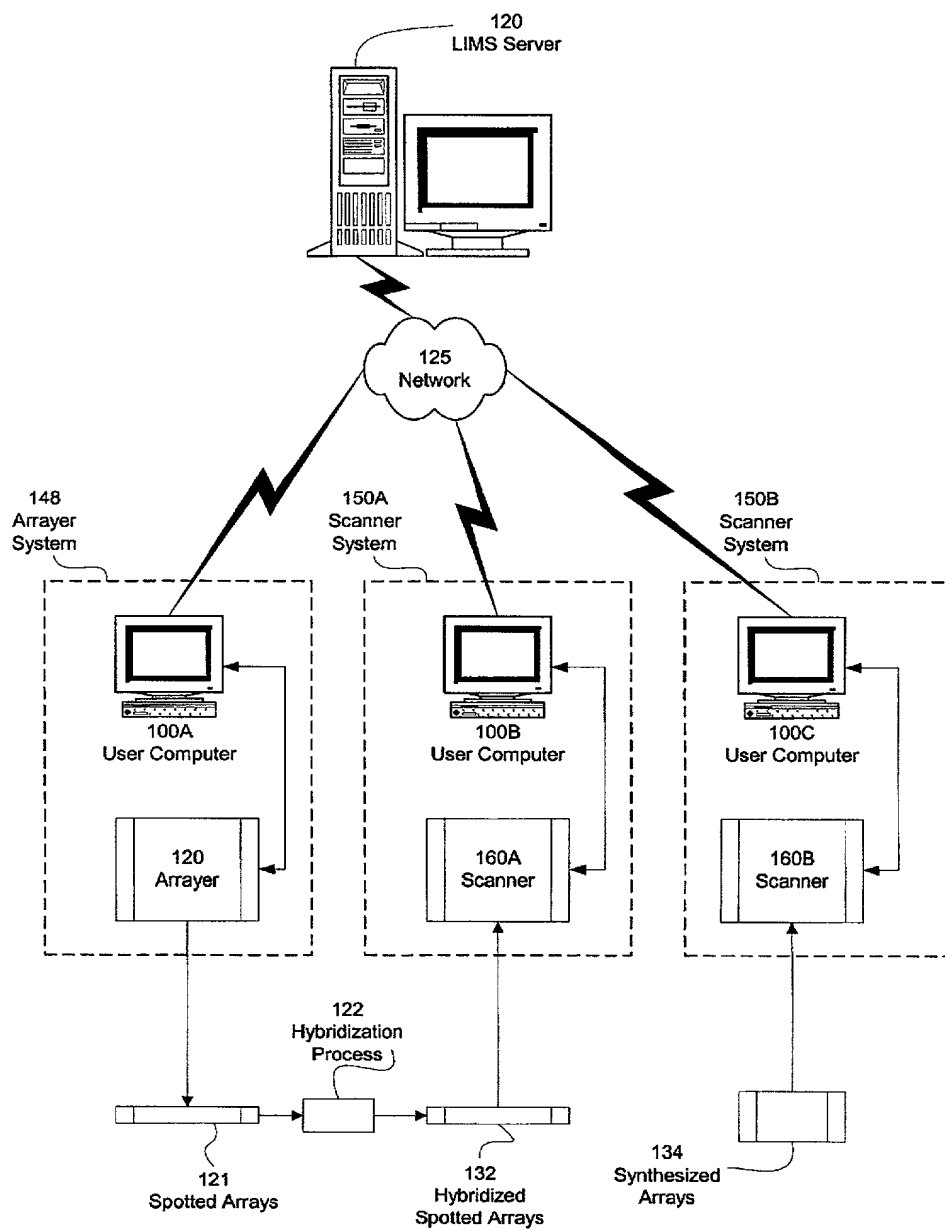
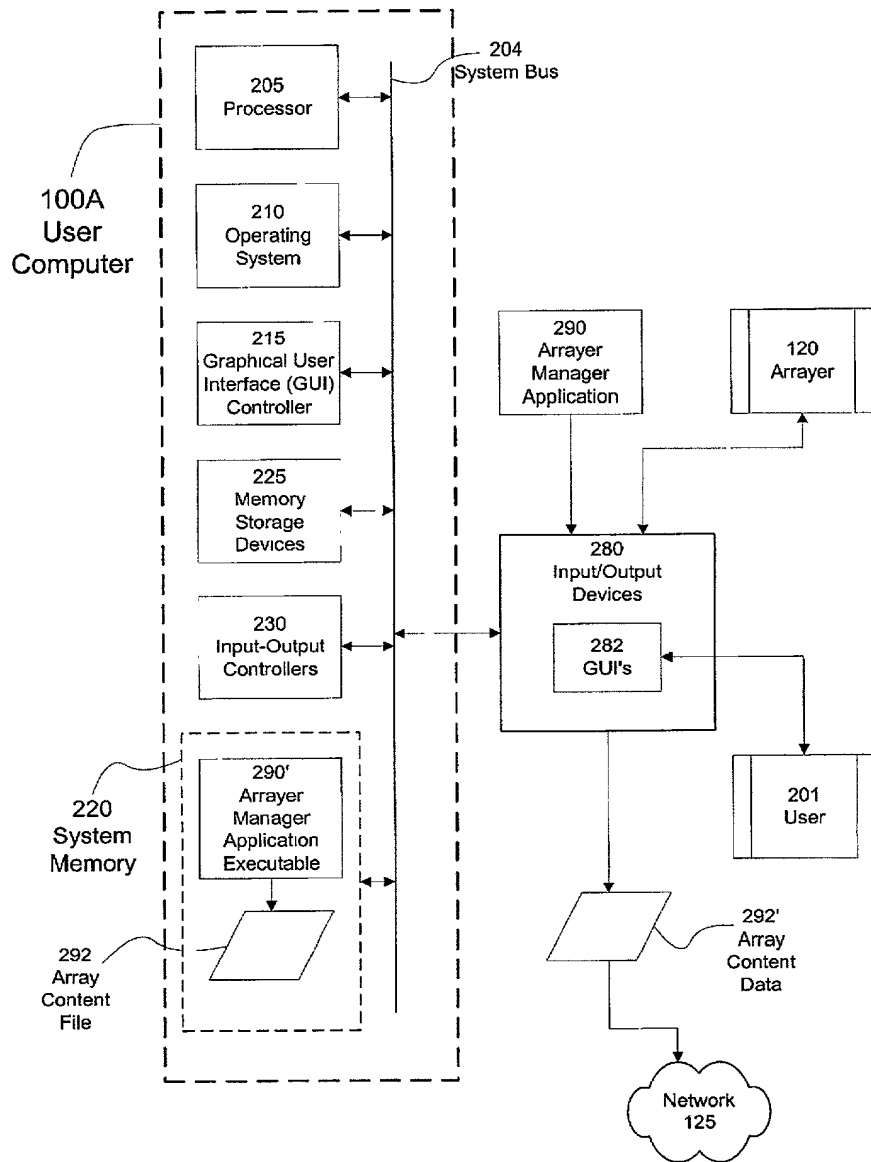


FIG. 2

FIGURE 2



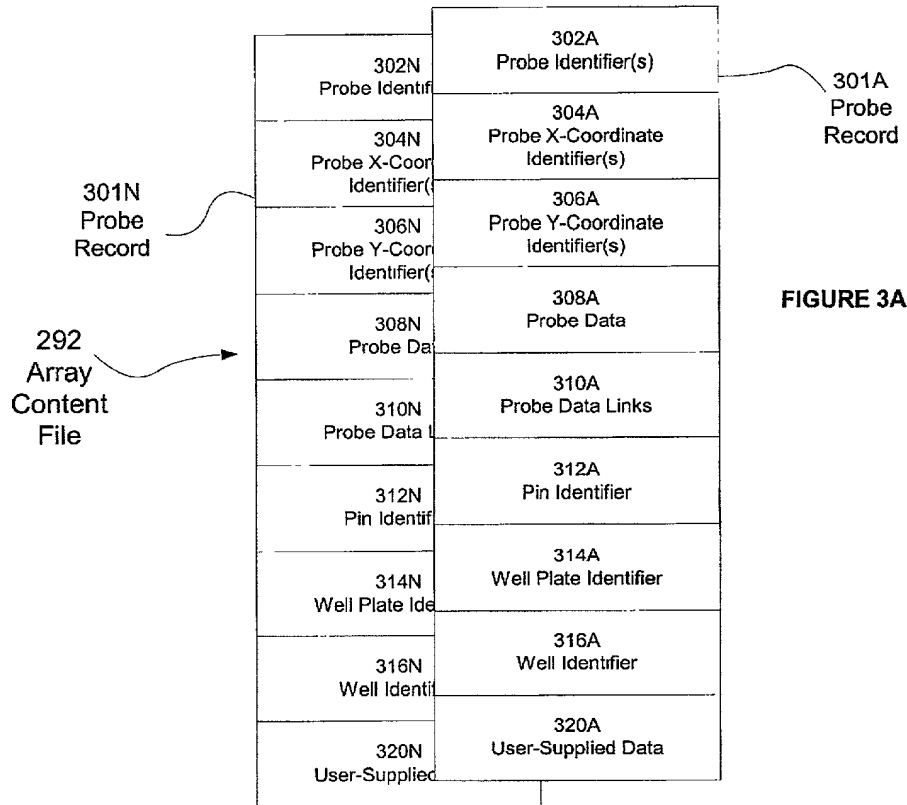


FIGURE 3A

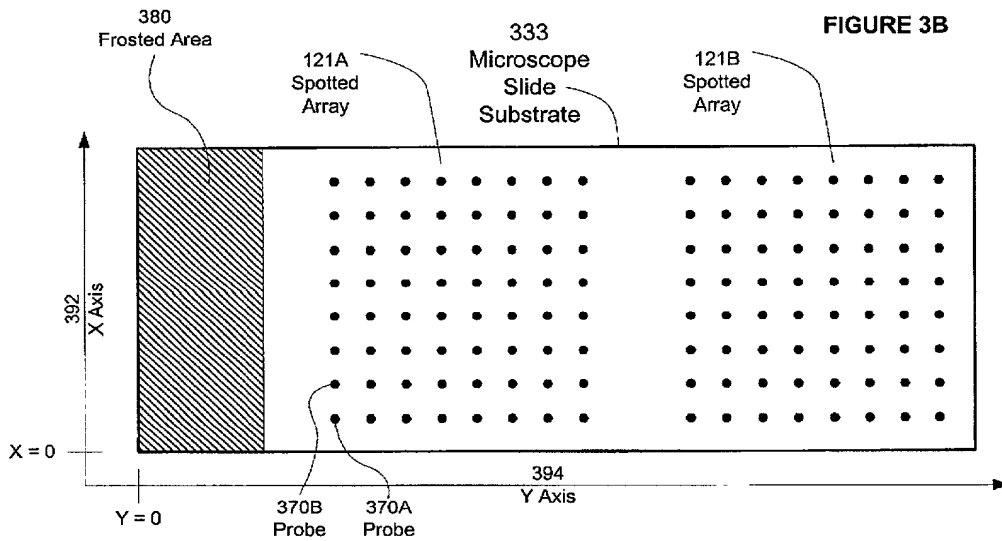
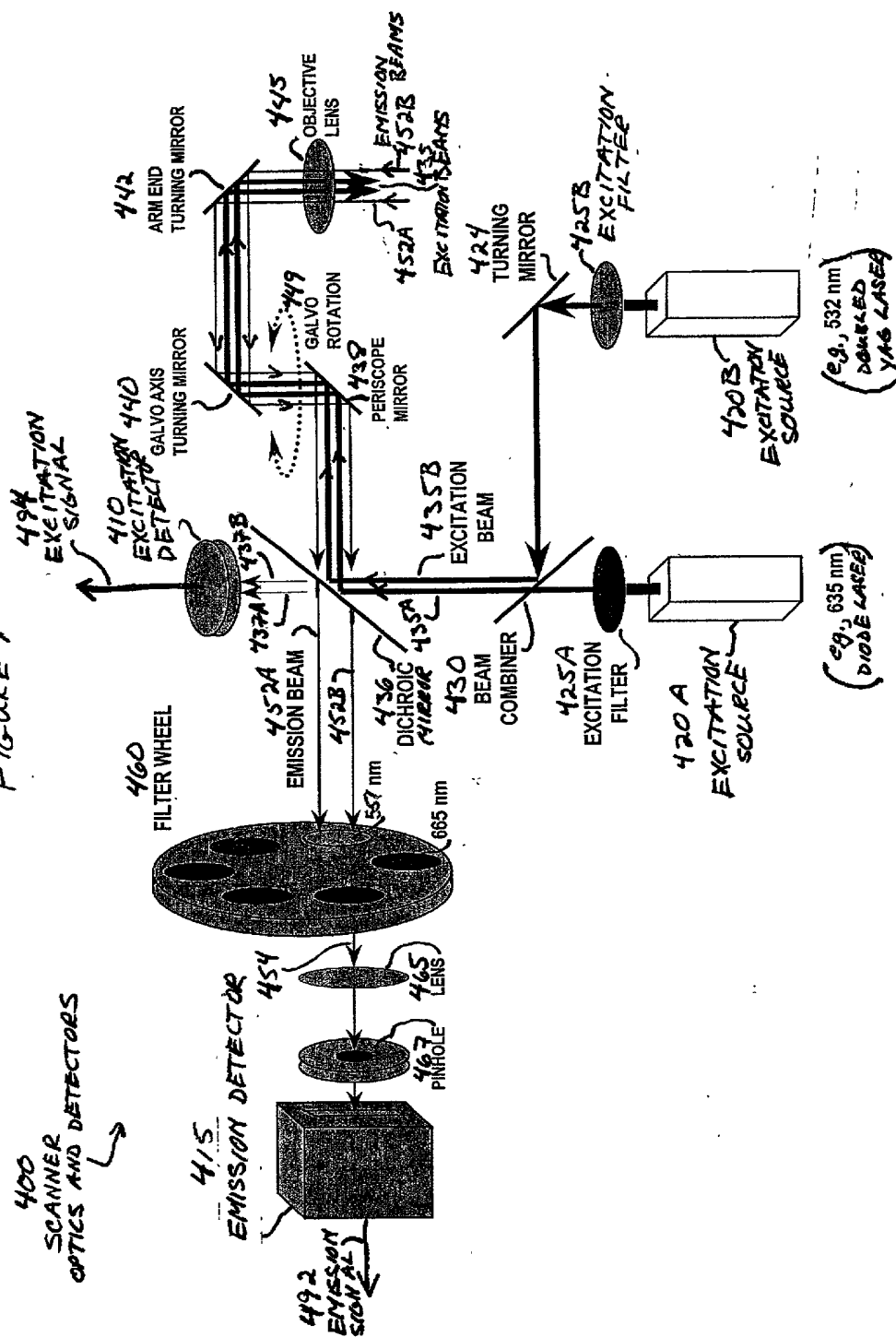


FIGURE 3B

FIGURE 4



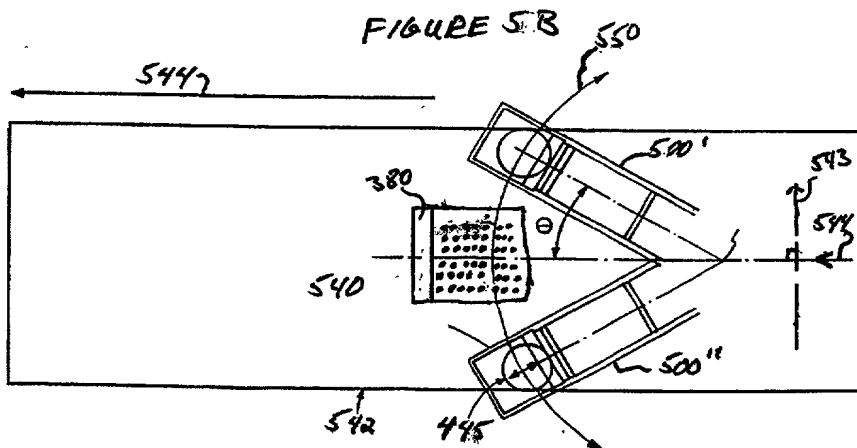
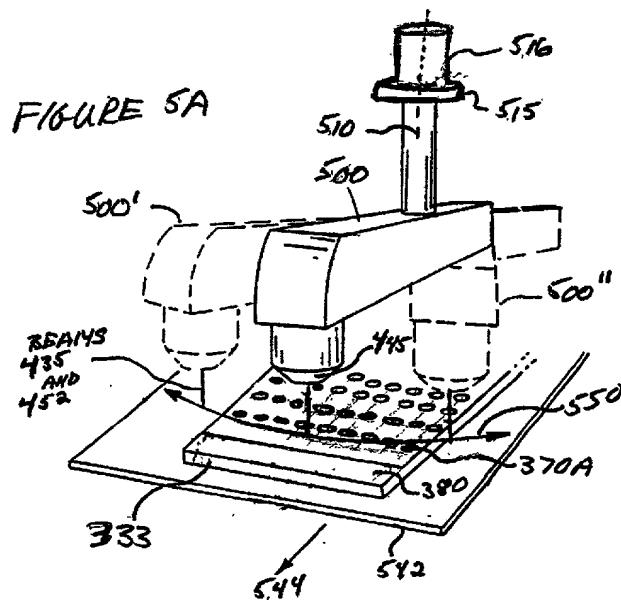


FIG. 7

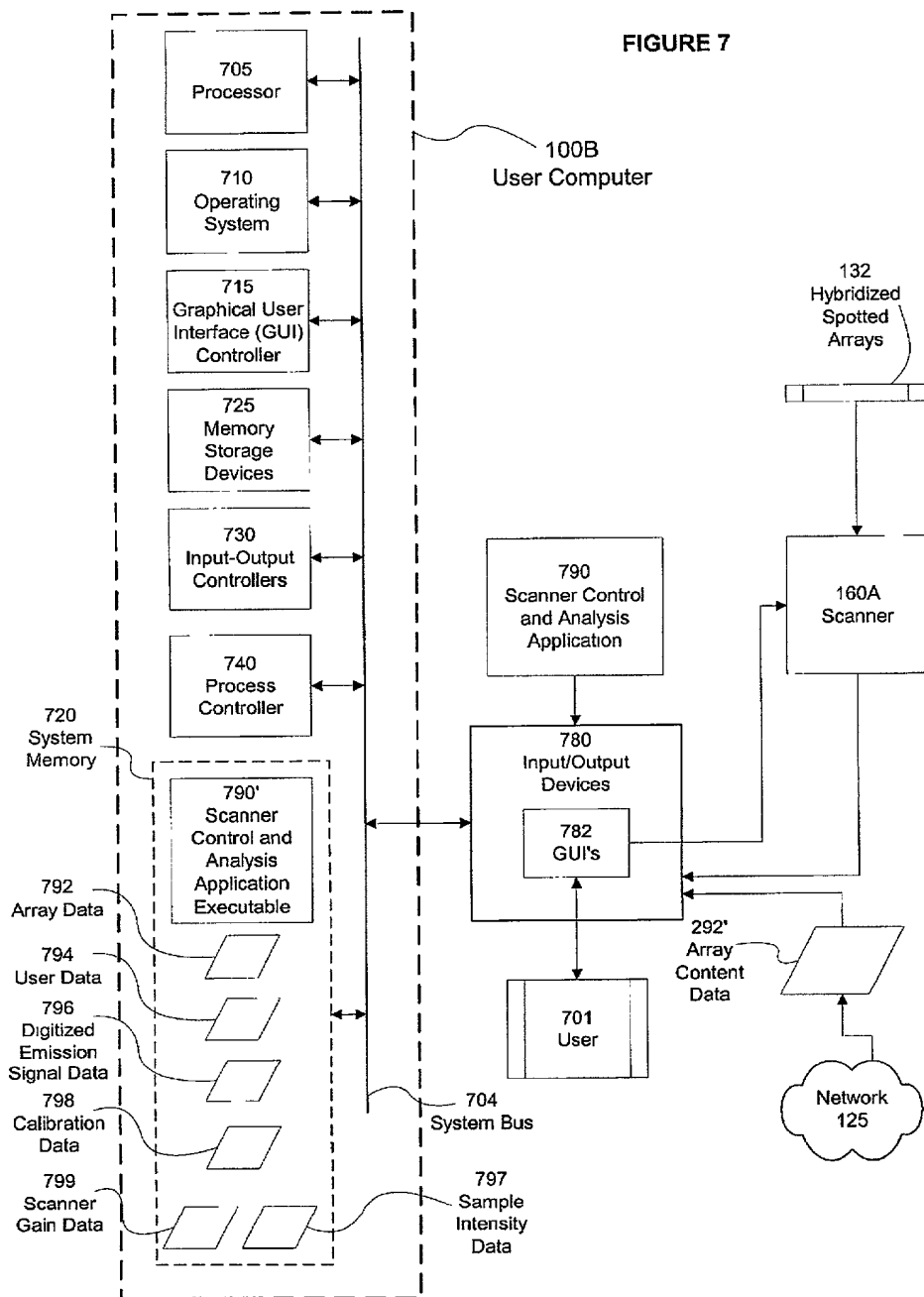


Figure 1 consists of 12 sub-graphs labeled (a) through (l), each showing the growth of *E. coli* O157:H7 in ground beef under different treatment conditions. The y-axis for all graphs is \log_{10} CFU/g, ranging from 0 to 10. The x-axis is time in hours, ranging from 0 to 120. The graphs show various growth curves, with some treatments showing significant inhibition of growth compared to the control.

- (a) Control: Shows a steady increase in bacterial count from approximately 10^1 to 10^8 CFU/g over 120 hours.
- (b) Salt: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (c) Acetic acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (d) Lactic acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (e) Citric acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (f) Malic acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (g) Succinic acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (h) Tartaric acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (i) Fumaric acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (j) Gluconic acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (k) Mannonic acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.
- (l) Galactonic acid: Shows a slight increase in bacterial count from approximately 10^1 to 10^2 CFU/g over 120 hours.

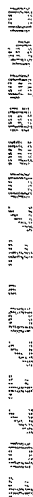


FIGURE 9

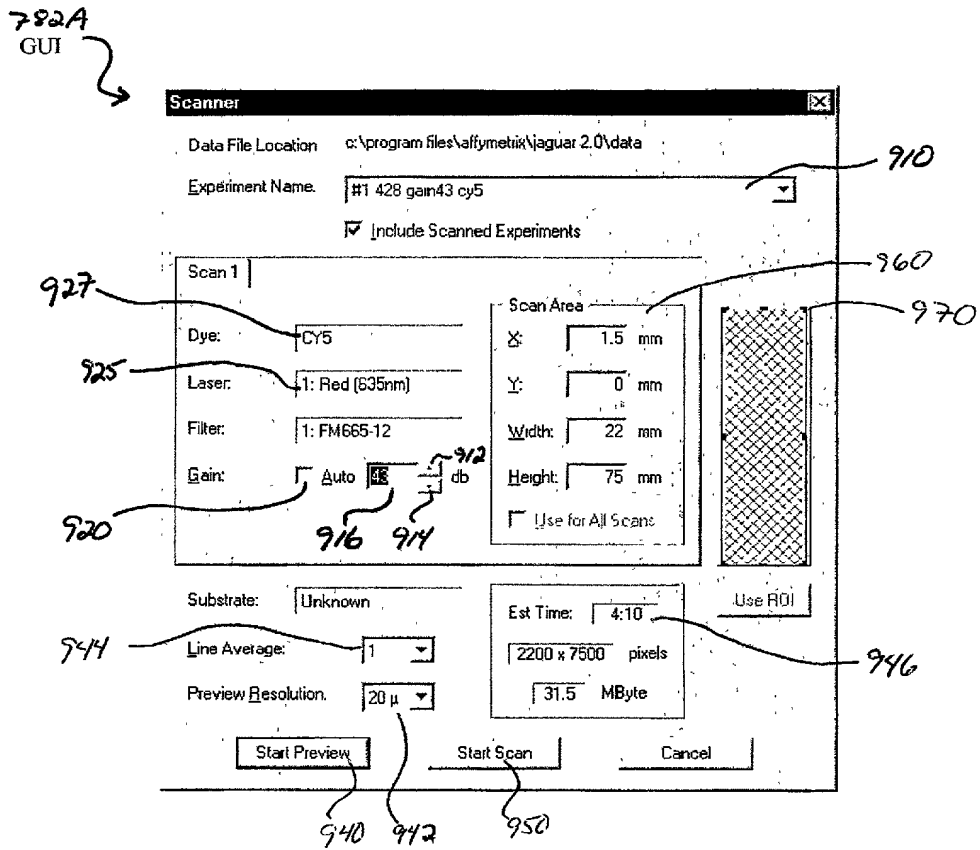


FIGURE 10

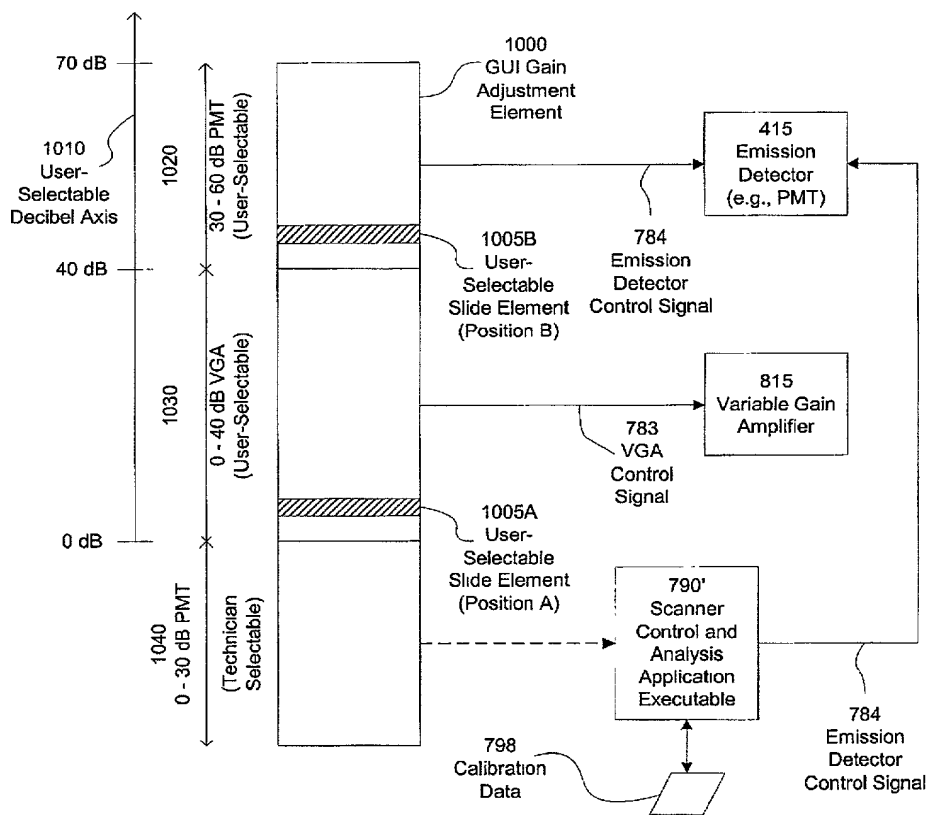


FIGURE 11

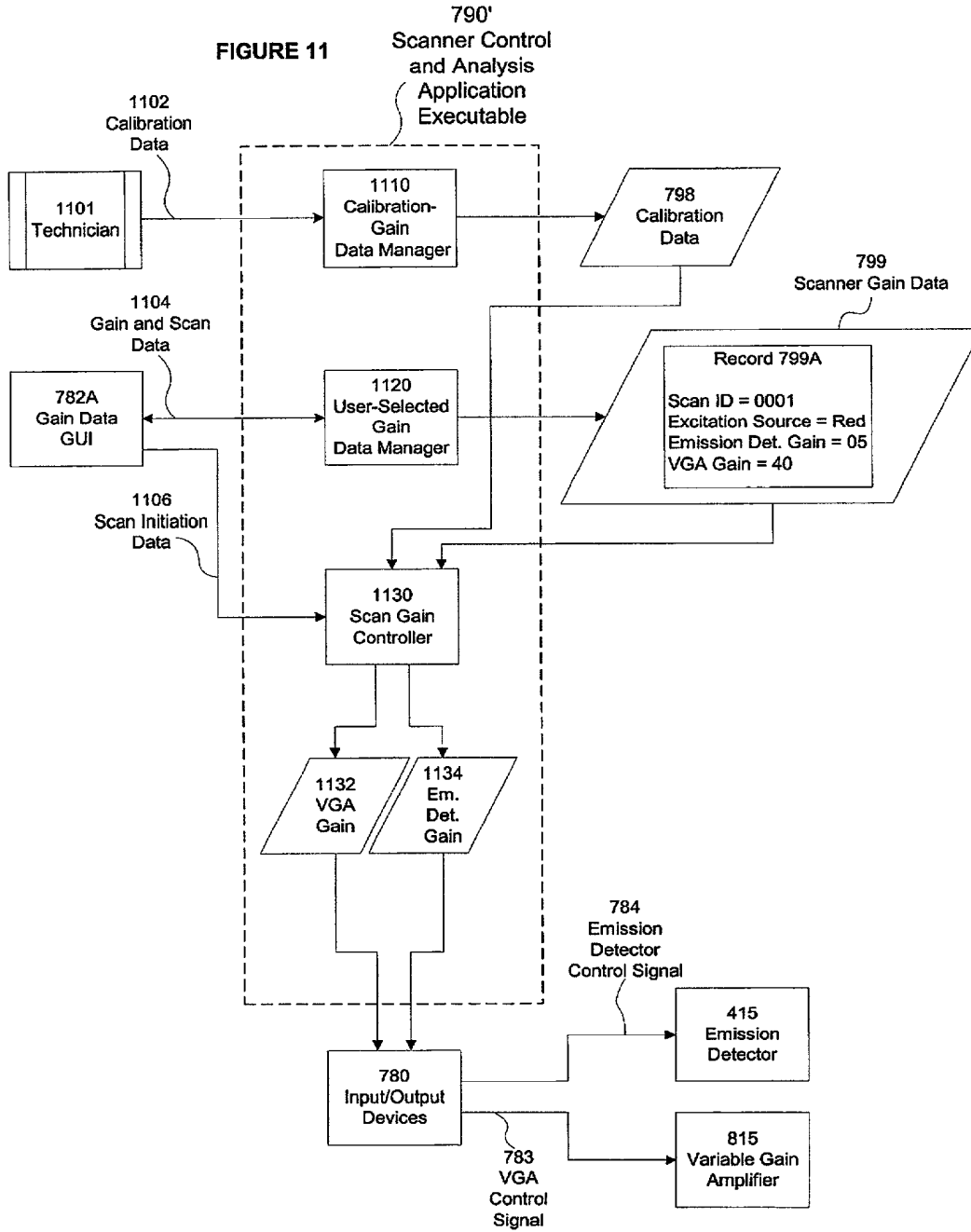


FIGURE 12A

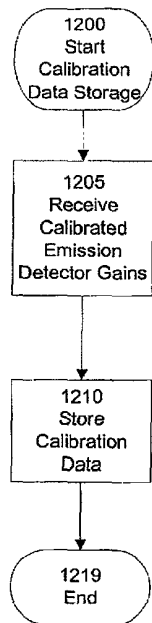


FIGURE 12B

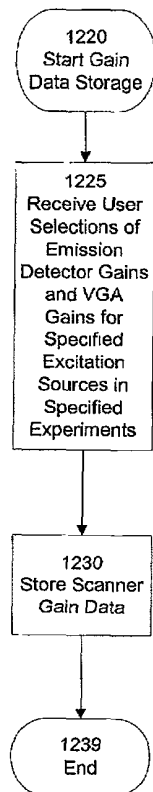
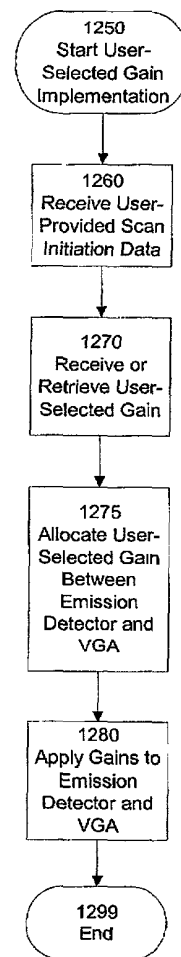


FIGURE 12C



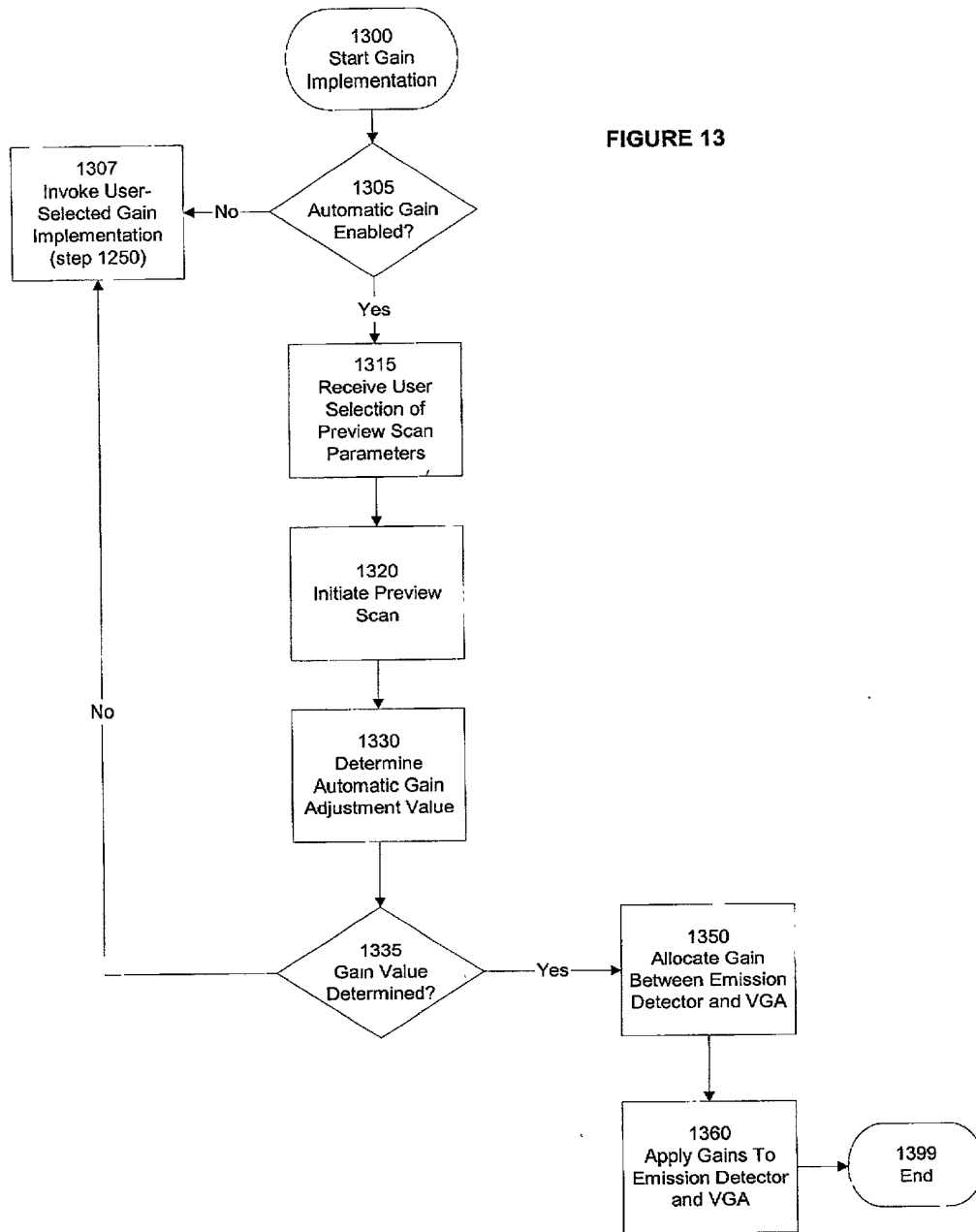


FIGURE 13

FIGURE 14

